U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2006-129-EA

CASEFILE/PROJECT NUMBER (optional):

PROJECT NAME: Square S Summer Camp Riparian Fence

LEGAL DESCRIPTION: T 4S R99W, Sec 8 W1/2 SW1/4

APPLICANT: USDI-BLM

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Proposed Action: The proposed action is construction of about ¼ mile of 4 strand barb wire fence to create about a 70 acre pasture which will not be used for continuous semi summer long cattle grazing. The affected BLM lands are currently fenced in with CDOW lands as part of the Taylor Camp horse pasture. Mantle Ranch will continue to be authorized to use part of the subject BLM lands to graze their 5 saddle horses. The fence will be a type D, 4 strand barb wire fence and will be constructed by hand. The fence will be connected to two existing fences, one of which is the historic horse pasture division fence and the other is the CDOW fence built in 1996. No motorized equipment will be used in the riparian area. A rubber tired backhoe may be used to brush a twelve foot wide right of way through big sagebrush on the uplands. Soil disturbance will be kept to the absolute minimum necessary to complete the job. No roads will be constructed to complete this project.

No Action Alternative: No fence would be constructed and the riparian area on BLM lands would continue to be negatively impacted by cattle use.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: None

NEED FOR THE ACTION: When the Colorado Division of Wildlife fenced most of their deeded ground on the Square S summer range in 1994, they fenced in about 70 acres of BLM lands south of the Square S Summer Camp (Taylor camp). For the past 4 or 5 years Boone Vaughn has been putting his heifers in the pasture for several months to the detriment of the riparian area on the BLM.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Livestock Grazing P 2-25

Decision Language: Range improvements are necessary to control livestock use and improve rangeland condition

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The entire White River Resource area has been classified as either attainment or unclassified for all pollutants, and most of the area has been designated prevention of significant deterioration (PSD) class II. The proposed action is not located within a ten mile radius of any special designation air sheds or non-attainment areas. The air quality criteria pollutant likely to be most affected by the proposed actions is the level of inhalable particulate matter, specifically particles ten microns or less in diameter (PM_{10}) associated with fugitive dust. No air quality monitoring data is available for the survey area. However, it is apparent that current air quality near the proposed location is good because only one location on the western slope (Grand Junction, CO) is monitoring for criteria pollutants other than $PM_{10.}$ Furthermore, the Colorado Air Pollution Control Division (APCD) estimates the maximum PM_{10} levels (24-hour average) in rural portions of western Colorado to be near 50 micrograms per cubic meter ($\mu g/m^3$). This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM_{10} (24-hour average) of 150 $\mu g/m^3$.

Environmental Consequences of the Proposed Action: Implementation of the proposed project will result in discontinued semi summer long cattle grazing on 70 acres of BLM land. Elimination of cattle use during this time period will allow the vegetative community to receive adequate rest from grazing which should improve vegetative health and increase effective ground

cover (litter accumulation). Increased ground cover will decrease soil exposure to eolian processes decreasing potential for fugitive dust production potentially improving air quality during dry and windy periods.

Environmental Consequences of the No Action Alternative: No fence would be built. Continuous semi summer long cattle grazing would continue resulting in further suppression of vegetative communities and significant loss of effective ground cover. Air quality would be compromised during dry and windy periods as exposed soils increase the potential for fugitive dust production.

Mitigation: None

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: The new fenceline intersects the boundary with the East Douglas Creek ACEC. The East Douglas Creek ACEC was designated an ACEC for its important biologically diverse plant communities, riparian habitat, and federal candidate Colorado River cutthroat trout habitat. The White River ROD/RMP directs BLM to manage ACECs in a manner that will maintain special values of the ACEC, allow multiple uses within that same context, and to cooperate with interested agencies, landowners, and other parties to prevent degradation of the special values of the ACECs.

Environmental Consequences of the Proposed Action: Fencing the riparian area east of the East Douglas Creek ACEC will not interfere with the objectives of the ACEC. The riparian area being fenced flows into Black Sulphur watershed which is not in the ACEC.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

CULTURAL RESOURCES

Affected Environment: The proposed new fence line location has been inventoried at the Class III (100% pedestrian) level with no cultural resources identified in the inventoried area.

Environmental Consequences of the Proposed Action: If mitigation measures are followed there will be no impacts to cultural resources.

Environmental Consequences of the No Action Alternative: There would be no impacts to cultural resources under the No Action Alternative.

Mitigation: The following mitigation measures will be followed during construction, operation, and maintenance of the project: All construction must be confined the surveyed route of the new fence line and the fence line to be removed.

All persons in the area who are associated with this project must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.

If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: The noxious weed houndstongue (*Cynoglossum officinale*) occurs in scattered spot infestations in and around Taylor camp. This is about 3/8 to ½ mile from the site of the proposed action.

Environmental Consequences of the Proposed Action: Areas of soil disturbance created by the proposed action may provide some sites for the establishment of houndstongue. If houndstongue were to establish and proliferate on these sites, there would be a long term decline in environmental quality in the area of the project site.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: The project area will be monitored for a minimum of 3 years post disturbance to detect the presence of noxious weeds. Any houndstongue which occurs will be eradicated using materials and methods approved in advance by the authorized officer.

MIGRATORY BIRDS

Affected Environment: The project area involves a south and east facing mountain big sagebrush slope (40-50 acres) and 20-30 acres of north slope aspen woodland. These habitats support nesting by a number of species of higher conservation interest, including: Brewer's sparrow (sagebrush) and broad-tailed hummingbird and red-naped sapsucker in the aspen. Although willow-dominated habitats within the protected downstream CDOW parcel are inhabited by a typical assemblage of high elevation riparian-associated birds, it is unlikely that

current conditions on the BLM parcel allow for the support of any higher interest birds (e.g., MacGillivray's warbler).

Environmental Consequences of the Proposed Action: Occurring late in the breeding season, vegetation clearing (about 0.25 acre) and fence construction activity would have no substantive influence on breeding activity of sagebrush associates. Controlling and substantially reducing the intensity of grazing use within this pasture would allow for the redevelopment of woody and herbaceous riparian growth on 500-600 feet of channel, as well as increase ground cover expression throughout the sagebrush and aspen communities within the pasture. It is likely that the upland avian communities would respond rather quickly with increased nesting density and brood survival. Riparian redevelopment would likely be longer term, but depending on the subsequent influence of horse use, vegetation recovery may be sufficient to allow for the reoccupation of this site by those species that require well-developed ground cover beneath woody canopies, such as fox sparrow and MacGillivray's warbler.

Environmental Consequences of the No Action Alternative: There would be no change in current upland and riparian conditions within the pasture. Although there would be no potential to disrupt 1 or 2 nesting attempts by migratory birds of higher conservation interest, stark contrasts in ground cover conditions would persist between the BLM and adjacent CDOW parcel.

Mitigation: None.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: There are no animals listed under the Endangered Species Act that inhabit or derive important benefit from the project area. The affected acreage is occupied by greater sage-grouse, a BLM sensitive species, during the spring through fall months as nesting, brood-rearing, and general summer/fall range. Recent research indicates that sage-grouse nest success and brood survival is influenced predominantly by herbaceous understory conditions, i.e., increasing success positively correlated with current and residual growth that is taller and denser. The suitability of brood range, in particular, is enhanced by conditions that promote the availability of insect and forb forage—properties that are inherent to well developed riparian communities.

Environmental Consequences of the Proposed Action: Controlling and substantially reducing the intensity of grazing use within this pasture would allow for the long term redevelopment of woody and herbaceous riparian growth on 500-600 feet of channel, as well as increase ground cover expression throughout the pasture's sagebrush community. It is likely that ground cover in the sagebrush and meadow sites along the channel would respond quickly with substantial declines in the rate of decline attributable to grazing—consistent with sage-grouse enhancements that increase the effective density and height of herbaceous cover through the brood period (after early July) and into the subsequent nesting season.

Environmental Consequences of the No Action Alternative: There would be no change in current upland and riparian conditions within the pasture. Opportunity to improve a small, but valuable parcel of sage-grouse brood and nest habitat would be foregone.

Mitigation: Flagging should be hung frequently from the top wire of this fence immediately upon installation in an effort to prevent any wire strikes by grouse (i.e., prior to gaining any familiarity with this new feature).

Finding on the Public Land Health Standard for Threatened & Endangered species: The project area generally meets the standard as a functional sage-steppe community with seasonal utility for sage-grouse. However, current patterns and intensity of grazing use detracts substantially from attributes important for sage-grouse nest and brood-rearing functions. The proposed action, by controlling and substantially reducing the intensity of grazing use, would serve to markedly enhance ground cover conditions in the pasture and better serve the land health indicators associated with standards 3 and 4.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed project area is located in Right Fork Canyon Creek which is situated in the headwaters of the Black Sulphur Creek watershed. Right Fork Canyon Creek is an intermittent stream with spring fed perennial reaches and is a tributary to Canyon Creek (also intermittent with spring fed perennial reaches) which flows into Black Sulphur Creek. Black Sulphur Creek is a rare perennial tributary to Piceance Creek which is a tributary to the White River. The White River is a tributary to the Green River in Utah which is a tributary to the Colorado River.

The "Status of Water Quality in Colorado – 2004" plus the 2006 update (CDPHE, 2006b) were reviewed for information related to the proposed project area. The entire project area is located in stream segment 20 of the White River basin. Stream segment 20 of the White River Basin is defined as the mainstems of Black Sulphur and Hunter Creeks from their sources to their confluences with Piceance Creek. Segment 20 has not been designated use-protected. An intermediate level of water quality protection applies to waters that have not been designated outstanding waters or use-protected waters. For these waters, no degradation is allowed unless deemed appropriate following an antidegradation review. The state has classified segment 20 as being beneficial for the following uses: Cold aquatic life 1, Recreation 2, and Agriculture. For stream segment 20, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 6.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli (CDPHE, 2006b).

Newly promulgated Colorado Regulations Nos. 93 and 94 (CDPHE, 2006c and 2006d, respectively) were also reviewed for information related to the proposed project area drainages. Regulation No. 93 is the State's list of water-quality-limited segments requiring Total Maximum Daily Loads (TMDLs). The 2006 list of segments needing development of TMDLs includes two segments within the White River - segment 9b, White River tributaries North & South Forks to Piceance Creek, specifically the Flag Creek portion (for impairment from selenium with a low priority for TMDL development) and segment 22, tributaries to the White River, Douglas Creek to the Colorado/Utah boarder, specifically West Evacuation Wash, and Douglas Creek (sediment impairments). Regulation 94 is the State's list of water bodies identified for monitoring and evaluation, to assess water quality and determine if a need for TMDLs exists. The list includes two White River segments that are potentially impaired – 9 and 22. Stream segment 20 was not listed.

Ground Water: The proposed project area is located in the headwaters of the Black Sulphur Creek watershed (~8,500 ft. above sea level) which is an area of substantial groundwater recharge within the Piceance Creek structural basin. Surface geology at the proposed project area is Uinta Formation (interbedded sandstones and shale) and is Tertiary in age. The Uinta Formation and the underlying Parachute Creek Member of the Green River Formation are broadly defined as the Upper Piceance Basin Aquifer. Ground water occurs in both bedrock and alluvial aquifers beneath the Piceance Basin. Unconsolidated alluvial aquifers are the most productive aquifers and can be found in drainage bottoms (Topper et al., 2003).

Environmental Consequences of the Proposed Action: Implementation of the proposed action will eliminate continuous semi summer long cattle grazing on 70 acres of BLM land situated in the headwaters of the Black Sulphur Creek catchment area. Eliminating continuous cattle grazing during this time period will help restore health and vigor to upland and riparian vegetative communities. Restoration of upland and riparian vegetative communities will help stabilize soils retaining sediment in the headwaters. Stabilization of soils in the headwaters will effectively reduce sediment loading to surface waters improving water quality in lower reaches of the drainage basin.

Construction of a12 foot right of way (ROW) may invite OHV travel possibly resulting in development of a two-track road. Road development could alter natural drainage patterns and potentially accelerate soil erosion as water may be channelized down the roadway.

Environmental Consequences of the No Action Alternative: No fence would be built. Continuous semi summer long cattle grazing would continue resulting in further suppression of vegetative communities as well as significant loss in effective ground cover and soil stabilizing agents (e.g. rooting structures, plant residue, ect…). Continued degradation to water quality would continue as hill slope soil erosion will increase sediment loading to surface water in the White River Basin.

Mitigation: Implement weed treatments and revegetation efforts as necessary to establish desirable plant communities, provide appropriate ground cover, increase soil stabilization, and maintain/improve water quality within the affected drainage basin. Discourage OHV use along the ROW by pulling *some* of the cleared vegetation back over the ROW after fence construction.

Finding on the Public Land Health Standard for water quality: Stream segment 20 of the White River Basin currently meets water quality standards set by the state. However, the affected portion of Right Fork Canyon Creek has a significant lack of stream bank stabilizing riparian vegetation and is likely not meeting standards during periods of peak flows do to sediment loading. Water quality in stream segment 20 is expected to improve with time as a result of implementation of the proposed action and will continue to meet standards for water quality.

WETLANDS AND RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The focus of the proposed action is approximately ¼ mile of a spring fed channel on a shale substrate.

Environmental Consequences of the Proposed Action: The proposed action will have a long term beneficial impact on the riparian environment by allowing full expression of the site's riparian potential

Environmental Consequences of the No Action Alternative: Without the proposed fence, and the protection provided by it, the riparian area will continue to suffer excessive trampling and foraging use.

Mitigation: Mitigation in the proposed action (no motor vehicles will be used for fence construction in the riparian area) is sufficient.

Finding on the Public Land Health Standard for riparian systems: The riparian area does not meet the Standard. Construction of the proposed fence will permit management that will enable BLM to meet or exceed the Standard in the future.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains, prime and unique farmlands, or Wild and Scenic Rivers, threatened, endangered or sensitive plants exist within the area affected by the proposed action. For threatened, endangered and sensitive plant species Public Land Health Standard is not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status plants. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: Soils in the project area are in the Irigul-Parachute complex and are primarily Parachute loams. These soils are moderately deep, well drained, formed in place from sandstone and shale parent material. These soils have a relatively high production potential that is primarily limited by a short growing season.

Environmental Consequences of the Proposed Action: The proposed action will have a net beneficial impact on soils by allowing full vegetation expression on the site which in turn will foster proper soil functions and processes.

Environmental Consequences of the No Action Alternative: Soils in the immediate riparian area will continue to not produce at their potential.

Mitigation: If mitigation is carried through from the other sections, then no additional mitigation is necessary.

Finding on the Public Land Health Standard for upland soils: Upland soils currently meet the Standard on a landscape and watershed basis. Implementation of this project will ensure that soils continue to meet the Standard in the future.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Vegetation in the project area is dominated by mountain big sagebrush with a diverse understory of grasses and forbs. The ecological site is mountain loam.

Environmental Consequences of the Proposed Action: Fence construction will create about **.**1 acres or less soil disturbance over the short term. The short and long term positive impact of fence construction will be to allow the area to achieve its full riparian potential by eliminating the present continuous seasonal use.

Environmental Consequences of the No Action Alternative: Heavy mid summer livestock use of the riparian area and adjacent swale will continue to compromise short and long term vegetation management objectives.

Mitigation: All areas of soil disturbance will be revegetated with Native seed mixture #6 immediately after fence construction is completed.

Native seed mix # 6		
Species (Variety)	Lbs. PLS per Acre	Ecological Sites
Bluebunch wheatgrass (Secar) Slender wheatgrass (Primar) Big Bluegrass (Sherman) Canby bluegrass (Canbar) Mountain brome (Bromer) Blue Flax	2 2 1 1 2 0.5	Alpine Meadow, Alpine Slopes, Aspen Woodlands, Brushy Loam, Deep clay Loam, Douglas-fir Woodland, Loamy Park, Mountain Loam, Mountain Meadows, Mountain Swale, Shallow Subalpine, Spruce-fir Woodland, Subalpine Loam

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial)*:* Upland plant communities currently meet the Standard on a landscape and watershed scale. Construction of the proposed fence will enhance our ability to meet or exceed the Standard in the future.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: The spring-borne channel associated with the proposed action does not support, and likely is incapable of supporting, a higher order aquatic community. This channel can only be expected to support a seasonal invertebrate-based system.

Environmental Consequences of the Proposed Action: Controlling and substantially reducing the intensity of grazing use within this pasture would allow for the redevelopment of woody and herbaceous riparian growth on 500-600 feet of channel, as well as increase ground cover expression throughout the sagebrush and aspen communities within the pasture. The proposed action would be expected to prompt increased riparian expression and improve channel function, as well as decrease sediment delivery from the contributing watershed within the pasture. Although the aquatic community would continue to be invertebrate-based, it is likely that the diversity and abundance of invertebrates would improve dramatically.

Environmental Consequences of the No Action Alternative: There would be no change in current riparian or channel conditions within the pasture. Degraded channel conditions would persist, with concentrated late summer livestock trampling and grazing thwarting any progress in channel rejuvenation (e.g., increasing density and vigor of perennial vegetation to capture and retain sediments as floodplain components). The channel would continue to support a rudimentary invertebrate-based aquatic community.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): The aquatic community within the pasture, in its current state, does not meet the land health standard. Implementing the proposed action would provide the means to better control the intensity of livestock use and, consequently, would be expected to prompt long term improvements in channel function and riparian expression—effects that would be consistent with eventual achievement of the land health standard.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed project area is encompassed by big game summer ranges that are typically occupied from May through October. Arguably, the most important attribute associated with these ranges would be the availability of a diverse and abundant forb component that offers a nutritious forage base during the final stages of gestation and during the entire period of lactation.

Non-game wildlife using this area are typical and widely distributed in extensive like habitats across the Resource Area and northwest Colorado; there are no narrowly endemic or highly specialized avian (see Migratory Birds above) or mammalian species known to inhabit those lands potentially influenced by this action. Well developed, higher elevation riparian systems may be expected to support resident small mammals that, because of the scarcity of such habitat, are relatively uncommon (e.g., montane vole, western jumping mouse). These species may occupy contiguous downstream habitats (i.e., fenced Division of Wildlife property), but under current conditions, could not be expected to inhabit riparian within the project pasture.

Environmental Consequences of the Proposed Action: Controlling and substantially reducing the intensity of grazing use within this pasture should prompt increasing vigor, density, and diversity in ground cover constituents within the pasture's riparian, sagebrush, and aspen communities. This response would, on a small scale, increase the availability and variety of broadleaf vegetation important for big game reproductive nutrition.

Riparian redevelopment would likely be longer term matter, but depending on the subsequent influence of horse use, vegetation recovery may be sufficient to allow for the eventual reoccupation of this site by those non-game species that require better developed ground cover beneath woody canopies.

Environmental Consequences of the No Action Alternative: There would be no change in current understory conditions within the pasture. An opportunity to improve forage and cover components of big game and nongame mammals would be foregone.

Mitigation: None.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The project locale generally meets the land health standard at most landscape scales, although concentrated livestock use in the vicinity of this perennial water source depresses important indicators of the standard on a local basis (e.g., residual litter, plant diversity/density appropriate to site potential). Substantial reductions in the intensity of livestock use within this pasture, as proposed, should manifest marked improvements in the vigor and

density of herbaceous ground cover, as well as the abundance of residual ground cover—effects that complement improved meeting of the standard at this scale.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation		X	
Cadastral Survey	X		
Fire Management		X	
Forest Management	X		
Geology and Minerals	X		
Hydrology/Water Rights			X
Law Enforcement		X	
Noise		X	
Paleontology	X		
Rangeland Management			X
Realty Authorizations	X		
Recreation		X	
Socio-Economics		X	
Visual Resources		X	
Wild Horses	X		

HYDROLOGY AND WATER RIGHTS

Affected Environment: The proposed action is situated in the headwaters of the Black Sulphur Creek watershed which is an area of substantial ground water recharge. Surface geology is Tertiary in age (Uinta Formation) and consists of interbedded sandstone and shale (Tweto, 1979). Less permeable shale layers underlying permeable sandstones serve as ground water conduits and at locations these shale/sandstone interfaces outcrop springs are commonly found. Two of these springs are located within the 70 acre project area and are identified in the table below.

Map Code	Quarter	Sec#	Twp	Range	Water Right Case #	SC	pH	Q (gpm)	Date Measured	Comments
183-05	SESW	8	4S	99W	85CW472	829	7.4	2.78	28-Jul-83	Perennial
183-20	SWSW	8	4S	99W	85CW352	881	7.4	2.61	28-Jul-83	Perennial

BLM springs 183-05 and 183-20 both provide perennial water to the adjacent stream reach in Right Fork Canyon Creek. Currently cattle use has effectively degraded the riparian community and stream channel/bank morphologic system within this perennial reach.

Environmental Consequences of the Proposed Action: Implementation of the proposed action will eliminate continuous semi summer long cattle grazing on 70 acres of BLM land

situated in the headwaters of the Black Sulphur Creek catchment area (Right Fork Canyon Creek). Because cattle tend to congregate near perennial water sources, eliminating continuous cattle grazing will help restore health and vigor to local riparian communities. As riparian communities are restored, stream bank and channel morphologic conditions will be naturally restored. Restoration of natural, stable stream channel/bank morphologic conditions will result in development of functional floodplains which will effectively increase ground water storage capacity in alluvial material, and potentially help sustain perennial flows in Right Fork Canyon Creek.

Environmental Consequences of the No Action Alternative: No fence would be built. Continuous semi summer long cattle grazing would continue resulting in further suppression of riparian communities and degradation of stream channel/bank morphologic conditions.

Mitigation: None

RANGELAND MANAGEMENT

Affected Environment: CDOW's fencing of their private lands on the Square S Summer Range created the present situation wherein livestock concentrate in the affected area and over-utilize it. Typically, Boone Vaughn puts 50-75 head of his yearling heifers in this mostly CDOW pasture for a couple of months in the mid summer.

Environmental Consequences of the Proposed Action: The proposed fence will prevent cattle using the contiguous 600 acres of CDOW lands from using the BLM riparian area and adjacent lands. The current level of continuous seasonal use is not compatible with long term rangeland and riparian area sustainability. The proposed fence will exclude cattle from the area allowing it to achieve its full productive potential.

Environmental Consequences of the No Action Alternative: Heavy mid summer livestock use of the riparian area and adjacent swale will continue to compromise short and long term vegetation management objectives.

Mitigation: None

CUMULATIVE IMPACTS SUMMARY: Development of the proposed action would have long-term cumulative impact of enhancing riparian expression within the drainage.

REFERENCES CITED:

Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Commission (WQCC), 2004a. Regulation No. 37 Classifications and Numeric Standards for Lower Colorado River Basin. Adopted 1983 and Effective January 20, 2004.

CDPHE-WQCC, 2006b. "Status of Water Quality in Colorado – 2006, The Update to the 2002 and 2004 305(b) Report," April 2006.

CDPHE-WQCC, 2006c. "Regulation No. 93, 2006 Section 303(d) List Water-Quality-Limited Segments Requiring TMDLs," effective April 30.

CDPHE-WQCC, 2006d. "Regulation No. 94, Colorado's Monitoring and Evaluation List," effective April 30.

Topper, R., K.L. Spray, W.H. Bellis, J.L. Hamilton, and P.E. Barkmann. 2003. Groundwater Atlas of Colorado, Special Publication 53. Prepared for State of Colorado Department of Natural Resources, Division of Minerals and Geology. Colorado Geological Survey. Denver, Colorado.

Tweto, Ogden. 1979. Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: Mantle Ranch, Boone Vaughn

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality, Water Quality, Surface and Ground Hydrology and Water Rights
Caroline Hollowed	Planning and Environmental Coordinator	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Gabrielle Elliott	Archeologist	Cultural Resources, Paleontological Resources
Mark Hafkenschiel	Rangeland Management Specialist	Rangeland Management , Vegetation, Invasive, Non-Native Species, Soils, Wetlands and Riparian Zones
Ed Hollowed	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Wildlife Terrestrial and Aquatic
Melissa J. Kindall	Hazmat Collateral; Range Technician	Wastes, Hazardous or Solid; Wild Horses
Chris Ham	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation, Visual Resources
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Penny Brown	Realty Specialist	Realty Authorizations

Finding of No Significant Impact/Decision Record (FONSI/DR)

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FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to construct the proposed fence subject to the stated mitigation because the BLM riparian area in the current situation does not meet the Standards for Rangeland Health. The proposed fence will effectively prevent continuous summer use of the affected area, allowing the riparian area to achieve its potential.

MITIGATION MEASURES:

1. All construction must be confined the surveyed route of the new fence line and the fence line to be removed.

2. All persons in the area who are associated with this project must be informed that if anyone is found disturbing historic, archaeological, or scientific resources, including collecting artifacts, the person or persons will be subject to prosecution.

3. The BLM authorized officer must be notified, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Activities must stop in the vicinity of the discovery and the discovery must be protected for 30 days or until notified to proceed by the authorized officer.

4. If in connection with operations under this contract the project proponent, his contractors, subcontractors, or the employees of any of them, discovers, encounters or becomes aware of any objects or sites of cultural or paleontological value or scientific interest such as historic or prehistoric ruins, graves or grave markers, fossils, or artifacts, the proponent shall immediately suspend all operations in the vicinity of the cultural or paleontological resource and shall notify the BLM authorized officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the authorized officer.

5. The project area will be monitored for a minimum of 3 years post disturbance to detect the presence of noxious weeds. Any houndstongue which occurs will be eradicated using materials and methods approved in advance by the authorized officer.

6. Flagging should be hung frequently from the top wire of this fence immediately upon installation in an effort to prevent any wire strikes by grouse (i.e., prior to gaining any familiarity with this new feature).

7. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

8. Implement weed treatments and revegetation efforts as necessary to establish desirable plant communities, provide appropriate ground cover, increase soil stabilization, and maintain/improve water quality within the affected drainage basin. Discourage OHV use along the ROW by pulling *some* of the cleared vegetation back over the ROW after fence construction.

9. All areas of soil disturbance will be revegetated with Native seed mixture #6 immediately after fence construction is completed.

Native seed mix # 6		
Species (Variety)	Lbs. PLS per Acre	Ecological Sites
Bluebunch wheatgrass (Secar)	2	Alpine Meadow, Alpine Slopes, Aspen Woodlands,
Slender wheatgrass (Primar)	2	Brushy Loam, Deep clay Loam, Douglas-fir
Big Bluegrass (Sherman)	1	Woodland, Loamy Park, Mountain Loam,
Canby bluegrass (Canbar)	1	Mountain Meadows, Mountain Swale, Shallow
Mountain brome (Bromer)	2	Subalpine, Spruce-fir Woodland, Subalpine Loam
Blue Flax	0.5	

NAME OF PREPARER: Mark Hafkenschiel

NAME OF ENVIRONMENTAL COORDINATOR:

SIGNATURE OF AUTHORIZED OFFICIAL: Kent E. Walter
Field Manager

DATE SIGNED: 06/19/06

ATTACHMENTS: General Map of the Proposed Action

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Location Map of the Proposed Action
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